Department of Energy
Idaho Operations Office
850 Energy Drive
Idaho Falls, Idaho 83401-1563

April 10, 1997

Mr. Randal W. Steger, Manager
Operating Permits Bureau
Permits & Enforcement
Idaho Division of Environmental Quality
410 N. Hilton, 3rd floor
Boise, ID 83706-1255

SUBJECT: Regulatory Position on the Status of CPP 709 and CPP 734 (OPE-EP-131-97)

Dear Mr. Steger:

Enclosed is information on the regulatory position of the status of CPP 709 and CPP 734 located at the Idaho Chemical Processing Plant. This information is provided in response to R. E. Bullock's February 28, 1997 letter requesting clarification on the status of CPP 709 and CPP 734. CPP 709 and CPP 734 are not on the RCRA Part A and were ancillary equipment to the ICPP Percolation Ponds. Both structures met the intent of and the requirements specified for closure of the Percolation Ponds. These two structures are scheduled for demolition within the next few months.

If you have any questions on this matter, please contact me at 526-0082.

Sincerely,

David L. Wessman
Environmental Specialist

Enclosure

cc w/encl: D. Michael Gregory, DEQ, Boise, Idaho

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To MIKE SORENSEN	From BART RICHARDS	
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STATUS OF CPP 709 AND CPP 734 AS THEY RELATE TO THE APPROVED CLOSURE OF THE ICPP PERCOLATION PONDS

The following is provided to document Lockheed Martin Idaho Technologies Company's (LMITCO's) position on the environmental status of the Idaho Chemical Processing Plant (ICPP) CPP 709 and CPP 734. These two basins, and incidental piping, were ancillary to the ICPP Percolation Ponds and the service waste system. Specific disposition of the ancillary equipment was not detailed in the Percolation Pond Closure plan. Clarification of the environmental status of these two basins and ancillary equipment (piping) is necessary for their proper characterization, management, and disposition as they are replaced and/or taken out of service. It is the Department of Energy , Idaho Operations Office (DOE-ID) and LMITCO's intent that CPP 709 and CPP 734, and ancillary equipment, will be managed in a manner consistent with the Idaho Department of Health and Welfare approved Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) Closure Plan for the Percolation Ponds.

The East-Side Service Waste (ESSW) facility, CPP 709, was constructed in 1951-1952. The units housed a basin and monitoring equipment. The ESSW collected liquid waste from the Fuel Process Building, CPP 602 laboratories, Remote Analytical Facility, Process Equipment Evaporator (PEW) Steam and Process Condensates, Waste Treatment Building, Liquid Effluent Treatment and Disposal (LET&D), Service Building - Powerhouse, Atmospheric Protection System (APS), New Waste Calcining Facility (NWCF), Waste Calcining Facility (WCF), Fluorinel Dissolution Process and Fuel Storage Facility (FAST), Waste Tank Farm cooling water, and Remote Analytical Laboratory (RAL). The liquid was routed through the CPP 709 basin and initially pumped to an injection well. The injection well was replaced by the percolation ponds in approximately 1984. Average flow rates through ICPP East Side facilities to the Percolation Ponds, as estimated in the Percolation Pond Closure Plan, was estimated to range between 2.1 million to 2.7 million gallons per day.

The West Side Service Waste (WSSW) facility, CPP 734, was constructed in 1959-1960 to house the basin and monitoring equipment. ICPP facilities sending liquid waste to the WSSW included the Process Improvement Facility (PIF) at CPP 637, PIF Low Bay Addition, Chemical Engineering Lab High Bay Facility, Coal Fired Plant Boiler house, Vehicle Monitoring Facility, and the Fuel Receipt and Storage Building. Nonhazardous waste water was routed to the CPP 734 basin for radiological monitoring, then flowed to the injection well. Pumps were added to CPP 734 in 1984 to transfer the service waste to the percolation ponds when the well was taken out of service. The Percolation Pond Closure Plan estimated the Westside facilities generated approximately 85,000 gallons of liquid waste per day. By late 1989 CPP 734 was replaced by CPP 796 and taken out of service. All lines transferring service waste through CPP 734 were cut and capped.

Analysis of the Percolation Pond waste stream indicated that although the service waste system serviced the entire ICPP, the HWMA/RCRA-regulated waste water came from he PEW process condensates (CPP 604). Complicating the closure was the fact that several HWMA/RCRA listed wastes had been sent to the PEW system at various times since the operation of the Percolation

Ponds began. These listed wastes were included on the RCRA Part A permit application . The PEW process condensates were considered listed hazardous waste via the mixture and derived from rule [40 CFR 261.3(a)(2)(iv)]. The listed waste contained in the PEW process condensates resulted in the entire East side service waste stream being categorized as hazardous waste.

In-flow of the PEW condensate waste water, carrying listed waste codes, into CPP 709 was terminated on January 9, 1990. The flow of uncontaminated waste water into CPP 709 continued until January 11, 1990, when it was replaced by CPP 797. During the two-day time period, approximately 5 million gallons of non-hazardous waste-water flowed through the ESSW, CPP 709, to the Percolation Ponds. After January 11, 1990, all lines delivering waste water to CPP 709 were cut and capped.

The Idaho Department of Health and Welfare approved closure process for the Percolation Ponds focused on the Percolation Pond soils. Soil samples from Ponds 1 and 2 were analyzed to determine if hazardous waste residues or hazardous constituents were present in concentrations exceeding established health-based risk standards. (The results of the health-based risk assessment performed on the Percolation Pond soils demonstrated that no remedial steps were necessary to meet the pre-established limits). The closure process in the Closure Plan stipulated that..."*The inlet piping from the PEW system which transported the hazardous component of the waste stream to the service waste system will be triple rinsed following the last discharge of hazardous wastewater. The triple rinsing procedure will involve pumping water through the pipe. The volume of water pumped will be three times the total volume of the pipe from the PEW to the service waste system. The pipe will also be isolated and capped by installing a blind flange.. *"

The triple rinsing of the pipe from the PEW to the service waste was accomplished with the five million gallons of water flushed through the system between Jan 9 and Jan 11, 1990. It is LMITCO position that although the Percolation Pond Closure Plan did not specifically address CPP 709, the procedure to clean the pipe was the intended method to clean all the ancillary equipment, including the CPP 709 basin.

The CPP 734 basin did not receive listed waste, as documented in section 2.1.3.3, Waste Stream Analysis, of the approved closure plan. Effluents from the WSSW were not considered to be HWMA/RCRA hazardous; however, one recorded incident of a low-level radiological contamination was noted in CPP 734.

To further support LMITCO's position, sediments from the basins of CPP 709 and CPP 734 were analyzed in 1992 for TCLP metals. The results of those analyses indicated there were no HWMA/RCRA hazardous constituents present in excess of the TCLP limitations in either basin.

The HWMA/RCRA Closure Plan for the ICPP Percolation Ponds 1 and 2 is dated June 29, 1992. The plan was approved by the Idaho Department of Health and Welfare, Division of Environmental Quality, in a letter to R. S. Rothman, DOE-ID, dated December 28, 1992. Although the CPP 709 and CPP 734 facilities were taken out of service approximately three years prior to preparation of the Percolation Pond closure plan, it is LMITCO's position that they met both the intent of and the requirements specified for closure of the Percolation Ponds. These two structures are scheduled for demolition in FY-97. No further characterization activities are necessary as a result of their former operations associated with the ICPP Service Waste System.